SUPPLEMENTAL MATERIAL

to accompany

Prenatal Lead Levels, Plasma Amyloid $\boldsymbol{\beta}$ levels and Gene Expression in Young

Adulthood

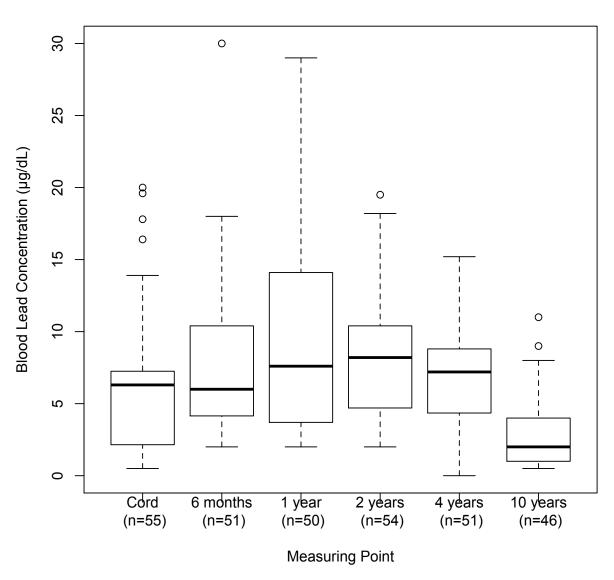
Maitreyi Mazumdar, Weiming Xia, Oliver Hofmann, Matthew Gregas, Shannan Ho Sui,

Winston Hide, Ting Yang, Herbert L. Needleman and David C. Bellinger

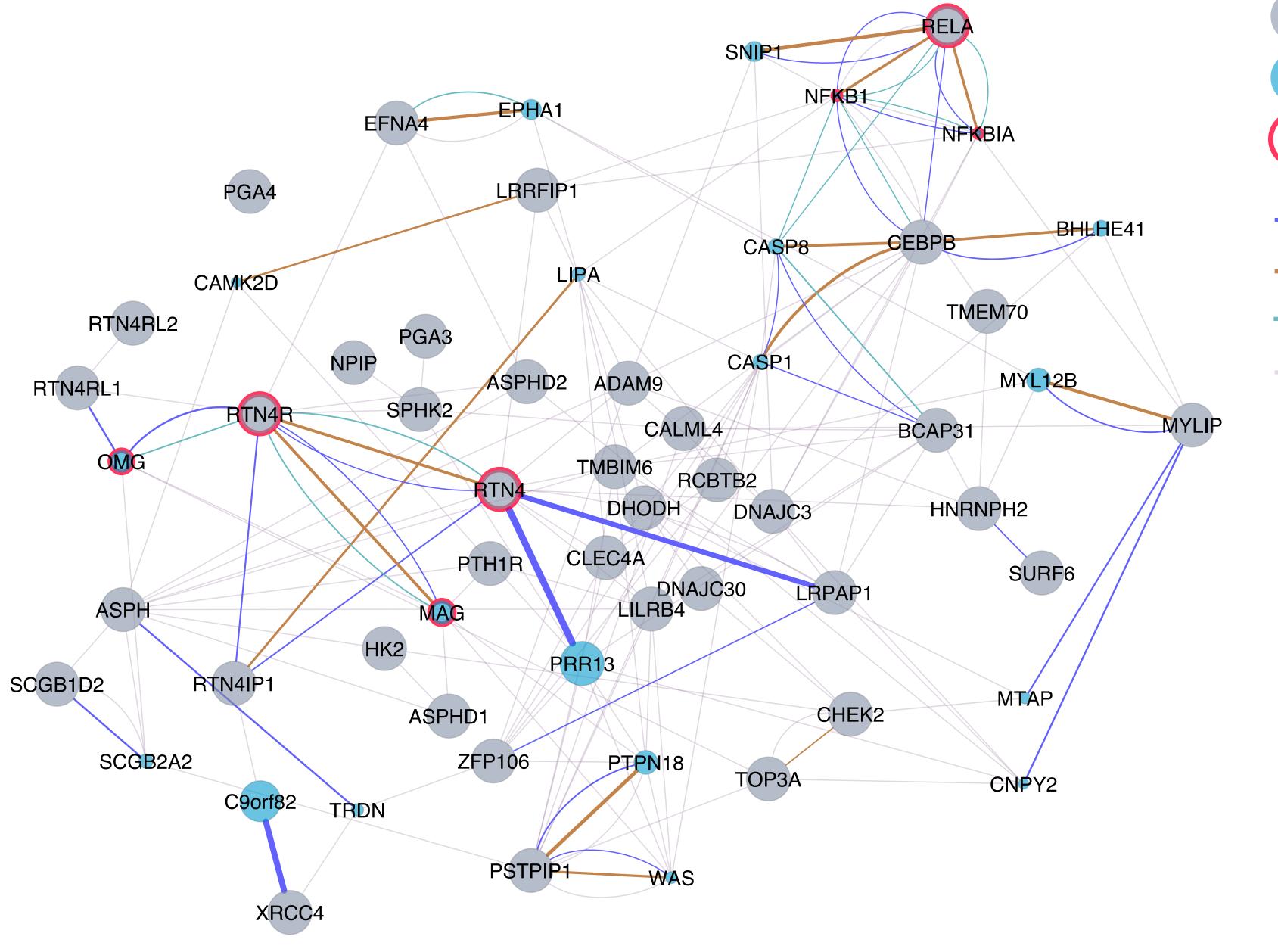
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Blood Lead Concentration at each Measuring Point



Supplemental Material, Figure 1. Blood lead concentration at each measuring point. In each box plot, the median value is indicated by the center horizontal line and the 25th and 75th percentiles are indicated by the lower and upper horizontal lines, respectively. The vertical lines represent 1.5 times the interquartile range, and circles represent outliers (i.e. values that are more than 1.5 times the interquartile range). To convert values for lead to micromoles per liter, multiply by 0.0483.



- Query gene
- Linker gene
- Neurogenesis-related
- Physical interaction
- Predicted binding
- Shared pathway
- Co-expressed

Supplemental Material, Figure 2. Gene network figure based on 10 subjects with prenatal lead concentration $\geq 10~\mu g/dL$. Network representation based on GeneMania (Warde-Farley et al, default parameters) representing functional association of 39 genes ('query genes') identified by IsoGene analysis as having decreased expression with prenatal lead levels $\geq 10~\mu g/dL$ and ten additional related genes based on functional association ('linker genes'). Association data generated from 144 public data sets include protein and genetic interactions, pathways, co-expression, co-localization and protein domain similarity. Node side reflects GeneMania scores (larger nodes are more relevant).

Warde-Farley D, Donaldson SL, Comes O, Zuberi K, Badrawi R, Chao P, Franz M, Grouios C, Kazi F, Lopes CT, Maitland A, Mostafavi S, Montojo J, Shao Q, Wright G, Bader GD, Morris Q

Supplemental Material, Table 1. Genes altered at prenatal lead concentration $< 10~\mu g/dL$

Symbol	Gene name
ADAM9	ADAM metallopeptidatse domain 9
ASPH	aspartate beta-hydroxylase
ASPHD1	aspartate beta-hydroxylase domain containing 1
ASPHD2	aspartate beta-hydroxylase domain containing 2
BCAP31	B-cell receptor-associated protein 31
CALML4	calmodulin-like 4
CEBPB	CCAAT/enhancer binding protein, beta
CHEK2	CHK2 checkpoint homolog
CLEC4A	C-type lectin domain family 4, member A
DHODH	dihydroorotate dehydrogenase
DNAJC3	DNAJ (HSP40) homolog, subfamily C, member 3
DNAJC30	DNAJ (HSP40) homolog, subfamily C, member 30
EFNA4	ephrin-A4
HK2	hexokinase 2
<i>HNRNPH2</i>	heterogeneous nuclear ribonucleoprotein H2
LILRB4	leukocyte immunoglobuin-like receptor, subfamily B, member 4
LRPAPI	lipoprotein receptor-related protein associated protein 1
<i>LRRFIP1</i>	leucine rich repeat (in FLII) interacting protein 1
MYLIP	myosin regulatory light chain interacting protein
NPIP	nuclear pore complex interacting protein
PGA3	pepsinogen 3, group I (pepsinogen A)
PGA4	pepsinogen 4, group I (pepsinogen A)
PSTPIP1	proline-serine-threonine phosphatase-interacting protein 1
PTHIR	parathyroid hormone 1 receptor
RCBTB2	regulator of chromosome condensation and BTB domain containing protein 2
RELA	v-rel reticuloendotheliosis viral oncogene homolog a (avian)
RTN4	reticulon 4
RTN4IP1	reticulon 4 interacting protein 1
RTN4R	reticulon 4 receptor
RTN4RL1	reticulon 4 receptor-like 1
RTN4RL2	reticulon 4 receptor-like 2
SCGB1D2	secretoglobin, family 1D, member 2
SPHK2	spinhgosine kinase 2
SURF6	surfeit 6
TMBIM6	transmembrane BAX inhibitor motif containing 6
TMEM70	transmembrane protein 70
TOP3A	topoisomerase (DNA) III alpha
XRCC4	X-ray repair complementing defective repair in Chinese hamster cells 4
<i>ZFP106</i>	zinc finger protein 106 homolog